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I claim:

Claims

1           1.     A seatback recliner mechanism, comprising:  
2                 a frame incorporated into a seat bottom and a seatback arm pivotally  
3                 secured to said frame;  
4                 said seatback arm including a lower arcuate surface upon which are  
5                 defined a first plurality of serrations;  
6                 a pawl hingedly secured to said frame and incorporating a second  
7                 plurality of serrations, said pawl further includes an interior aperture defined by  
8                 an inner wall configuration;  
9                 a cam rotatably secured to said frame in seating fashion within said  
10                inner wall configuration, said cam exhibiting a specified exterior configuration;  
11                a lever pivotally secured to said cam and extending from said frame;  
12                and  
13                said cam being rotated in a first direction, such that said exterior  
14                configuration engages said inner wall configuration of said pawl and to bias  
15                said second plurality of serrations in abutting contact against said first plurality  
16                of serrations, said cam being rotated in a second direction to cause said pawl to  
17                hingedly disengage from abutting contact with said seatback arm.

1           2.     The seatback recliner mechanism as described in claim 1, said  
2                 second plurality of serrations extending along an upper arcuate surface of said  
3                 pawl extending in substantially opposing fashion relative to said lower arcuate  
4                 surface of said seatback arm.

1           3.     The seatback recliner mechanism as described in claim 1, said  
2 inner wall configuration of said pawl comprising a first plurality of projections,  
3 said exterior configuration of said cam comprising a second plurality of  
4 projections which co-act with said first plurality of projections between said  
5 first and second rotated directions.

1           4.     The seatback recliner mechanism as described in claim 3, each  
2 of said pawl and cam further comprising first, second and third co-acting  
3 projections.

1           5.     The seatback recliner mechanism as described in claim 1, said  
2 frame further comprising an inner plate and a spaced apart outer plate  
3 sandwiching therebetween said pawl, cam and pivotally secured seatback.

1           6.     The seatback recliner mechanism as described in claim 5,  
2 further comprising a main pivot pin extending through aligning apertures in  
3 said spaced-apart inner and outer plates, a main coil spring securing to an  
4 exterior face of said outer plate and biasing said seatback arm in a forwardly  
5 pivoting direction.

1           7.     The seatback recliner mechanism as described in claim 5,  
2 further comprising a cam pivot pin extending through a central aperture defined

3 in said cam and additional aligning apertures in said inner and outer plates, an  
4 extending end of said cam pivot pin engaging said lever.

1 8. The seatback recliner mechanism as described in claim 7,  
2 further comprising a secondary coil spring secured to an exterior face of said  
3 outer plate and biasing said lever in a counter-clockwise direction.

1 9. The seatback recliner mechanism as described in claim 5,  
2 further comprising a pawl rivet seating through an aperture in said pawl  
3 defining said hinged connection, said pawl rivet seating through additional and  
4 aligning apertures in said inner and outer plates.

1 10. The seatback recliner mechanism as described in claim 5,  
2 further comprising a pair of spacer bushings engaging additional and aligning  
3 pairs of apertures in said inner and outer plates.

1 11. The seatback recliner mechanism as described in claim 6,  
2 further comprising an extending end of said main coil spring engaging a  
3 projecting end of a rivet extending between top rear locations associated with  
4 said inner and outer plates.

1           12.     The seatback recliner mechanism as described in claim 8,  
2     further comprising an extending end of said secondary coil spring engaging an  
3     angled projection associated with said outer plate.

1           13.     A seatback recliner mechanism, comprising:  
2             a frame incorporated into a seat bottom, said frame including an inner  
3     plate and a spaced-apart outer plate, a seatback arm sandwiched between said  
4     inner and outer plates and so as to be pivotally secured to said frame;

5             said seatback arm including a lower arcuate surface upon which are  
6     defined a first plurality of serrations;

7             a pawl hingedly secured to said frame and incorporating a second  
8     plurality of serrations extending along an upper arcuate surface in substantially  
9     opposing fashion relative to said first plurality of serrations, said pawl further  
10    includes an interior aperture defined by an inner wall configuration exhibiting a  
11    first plurality projections;

12            a cam rotatably secured to said frame in seating fashion within said  
13    inner wall configuration, said cam exhibiting a specified exterior configuration  
14    exhibiting a second plurality of projections which co-act with said first  
15    plurality of projections associated with said cam;

16            a lever pivotally secured to said cam and extending from said outer  
17    plate; and

18            said cam being rotated in a first direction, such that said exterior  
19    configuration engages said inner wall configuration of said pawl and to bias

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- 20      said second plurality of serrations in abutting contact against said first plurality
- 21      of serrations, said cam being rotated in a second direction to cause said pawl to
- 22      hingedly disengage from abutting contact with said seatback arm.